# UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

:

FRIENDS OF THE EARTH,

:

Plaintiff

Civil Action No.:

04-0092 RMU

v.

Document Nos.:

12, 18, 20

UNITED STATES ENVIRONMENTAL

PROTECTION AGENCY, et al.,

:

Defendants

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#### **MEMORANDUM OPINION**

GRANTING THE DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT; DENYING THE PLAINTIFF'S MOTION FOR SUMMARY JUDGMENT

#### I. INTRODUCTION

This matter comes before the court on the parties' cross motions for summary judgment. Friends of the Earth brings suit against the Environmental Protection Agency ("EPA") alleging that EPA's approval of the District of Columbia's proposed "total maximum daily loads" ("TMDLs") of pollutants for the Anacostia River violates the Clean Water Act and EPA's duty to act non-arbitrarily under the Administrative Procedure Act. The plaintiff claims that EPA acted improperly by (1) calculating TMDLs on an annual and seasonal basis rather than a daily basis, (2) approving TMDLs that achieve annual and seasonal but not *daily* water quality standards, and (3) assigning wasteloads to categories of sources instead of to individual point sources. EPA and intervenor District of Columbia Water and Sewer Authority (collectively, "defendants") move for summary judgment, arguing that EPA's decision should be upheld. Because the court finds the TMDL locution ambiguous in the context of the Clean Water Act as a whole, because sufficient evidence exists that the TMDLs were reasonably calculated to achieve daily water quality

standards, and because the TMDLs subject point sources to specific percentage wasteload reductions, the court grants the defendants' motions for summary judgment.

#### II. BACKGROUND<sup>1</sup>

#### A. Factual Background

Congress enacted the Clean Water Act ("CWA") "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The CWA attempts to achieve this goal in part by (a) establishing technology controls that regulate discharges into waterbodies and (b) promulgating water quality standards based on how a body of water should be used (for example, recreational or wildlife). 33 U.S.C. § 1311(b). These measures, known as "effluent controls," include technology-based abatement methods, such as filtration or recycling, and the issuance of permits by EPA. *Id*.

Because effluent controls alone may not prevent unsatisfactory pollution levels, Congress also mandated that the states promulgate water quality standards ("WQSs"). *Id.* § 1313(a). States must supplement these standards with "total maximum daily loads" for pollutants in a waterbody if effluent controls alone cannot achieve the WQSs. *Id.* at § 1313(d)(1)(C). A TMDL equals the maximum concentration of a pollutant in a waterbody for a given time and is calculated "at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality." *Id.*; 40 C.F.R. § 130.2(i). EPA's regulations permit TMDLs to be expressed "in terms of either mass per time, toxicity, or other

<sup>&</sup>lt;sup>1</sup> The parties agree that this case concerns only issues of law and that there are no material facts in dispute. EPA's Statement of Material Facts at 1-2.

appropriate measure." 40 C.F.R. § 130.2(i). TMDLs encompass discharges from specific sites such as refineries along a river known as point sources, nonpoint sources such as runoff near a river due to land development, and naturally occurring or "natural background" pollutants. *Id.* EPA regulations describe a TMDL as the sum of the loading allotments for point sources of pollution ("wasteload allocations") and for nonpoint and natural background sources ("load allocations"). 40 C.F.R. §§ 130.2(e)-(i). EPA approves or disapproves a state's proposed WQSs and TMDLs by assessing their conformance with the CWA. 33 U.S.C. § 1313(d)(2).

In many cities, the District included, the combination of antiquated municipal sewage infrastructure and periodic long and heavy rains results in sewage overflow into adjacent waterbodies. Brief of Amici Curiae Ass'n of Metro. Sewerage Agencies *et al.* at 2-3. In 1987, Congress created a stormwater management control program to address this problem which allows flexible approaches to permitting for municipal storm sewer discharges under section 402(p) of the CWA. 33 U.S.C. § 1342(p) (1987). In 2000, Congress added section 402(q) to the CWA to provide that each permit issued for a discharge from a combined storm sewer conform to the EPA's Combined Sewer Overflow ("CSO") policy. The Weather Water Quality Act of 2000, Pub. L. 106-554, § 112(a), 114 Stat. 2763. EPA's CSO policy gives states and localities several options for managing sewage overflow from heavy rains. CSO Control Policy, 59 Fed. Reg. 18,688 (Apr. 19, 1994). These options include permitting processes for long-term plans that allow for various annual overflow events, unlike the uniform and regular daily load limits found in section 303(d). *Id.* at 18,692.

In 1998, the District of Columbia determined that the Anacostia River was in violation of the District's WQSs for dissolved oxygen and turbidity. EPA's Mot. for Summ. J. ("EPA's MSJ") at 3. Thus, in 2001, the District submitted and EPA approved annual TMDLs for

dissolved oxygen. *Id.* at 8. Dissolved oxygen violations occur when decomposing pollutants create a biochemical oxygen demand ("BOD") in waterbodies that depletes oxygen necessary for aquatic life. *Id.* at 6-7. The District found that large rainfalls resuspend river sediment, thus causing chemical reactions that reduce oxygen levels. *Id.* at 16-17. Because the sediment remains chemically active for a number of years, the District concluded that measuring BOD load reductions in years would be appropriate. *Id.* EPA concurred with the District's decision to use the yearly figure, and the District used computer modeling to simulate river conditions and determine an annual BOD TMDL adequate to meet daily WQSs. *Id.* at 18-20.

In 2002, EPA proposed and finalized seasonal TMDLs for turbidity. *Id.* at 8. Turbidity violations occur when total suspended solids ("TSS") occlude waterbodies, causing murkiness which hinders recreational enjoyment and blocks light necessary for plant growth. *Id.* at 6-7. From a prior study involving the Anacostia River, EPA (1) established a 15 mg/L daily TSS concentration level necessary for protecting aquatic life, (2) concluded that TSS concentrations have an insignificant impact on aquatic life outside of the growing season, then (3) used an updated version of the computer model used by the District to calculate the TSS percentage reduction (77%) in the river necessary to achieve the TSS TMDL (a seasonal average daily concentration of 15 mg/L). *Id.* at 20-22.

## **B.** Procedural History

In 2003, Friends of the Earth sued EPA in the D.C. Circuit, claiming that both the dissolved oxygen and the turbidity TMDLs were insufficient for achieving the District's WQSs and that EPA acted arbitrarily in approving them. *Friends of the Earth v. EPA*, 333 F.3d 184 (D.C. Cir. 2003). The D.C. Circuit held that it lacked subject-matter jurisdiction and transferred the case here for review pursuant to the Administrative Procedure Act ("APA"). *Id.* at 193. In

March 2004, the District of Columbia Water and Sewer Authority ("WASA"), the agency responsible for the District's TMDL proposals, moved and was permitted to intervene as defendant.

In May 2004, the plaintiff filed a motion for summary judgment contending that EPA's approval of annual and seasonal TMDLs violates the CWA's "express requirement to establish . . . 'total maximum *daily* load[s].'" Pl.'s Mot. for Summ. J. ("Pl.'s MSJ") at 11 (emphasis in original). The plaintiff claims that, even if non-daily calculations are permissible, the TMDLs themselves violate the District's daily WQSs. *Id.* at 11-13. Finally, the plaintiff alleges that EPA violated its own regulations by not allocating TMDL wasteloads to individual point sources, but instead to categories of sources. *Id.* at 13. In June and July, EPA and WASA filed their own motions for summary judgment, contending that long-standing agency practice and statutory interpretation justify the calculation of non-daily TMDLs. EPA's MSJ at 8-9. They further claim that EPA's approval represents a reasonable judgment, within agency discretion, and based on the administrative record that the TMDLs will meet the District's daily WQSs. *Id.* They deny plaintiff's accusation that assigning wasteloads to categories instead of point sources violates EPA's regulations. *Id.* The court now addresses all parties' motions for summary judgment.

#### III. ANALYSIS

## A. Legal Standard for a Motion for Summary Judgment

Summary judgment is appropriate when "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." FED. R. CIV. P. 56(c); see also Celotex Corp. v. Catrett, 477 U.S. 317, 322

(1986); *Diamond v. Atwood*, 43 F.3d 1538, 1540 (D.C. Cir. 1995). To determine which facts are "material," a court must look to the substantive law on which each claim rests. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A "genuine issue" is one whose resolution could establish an element of a claim or defense and, therefore, affect the outcome of the action. *Celotex*, 477 U.S. at 322; *Anderson*, 477 U.S. at 248.

In ruling on a motion for summary judgment, the court must draw all justifiable inferences in the nonmoving party's favor and accept the nonmoving party's evidence as true. *Anderson*, 477 U.S. at 255. A nonmoving party, however, must establish more than "the mere existence of a scintilla of evidence" in support of its position. *Id.* at 252. To prevail on a motion for summary judgment, the moving party must show that the nonmoving party "fail[ed] to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." *Celotex*, 477 U.S. at 322. By pointing to the absence of evidence proffered by the nonmoving party, a moving party may succeed on summary judgment. *Id.* 

In addition, the nonmoving party may not rely solely on allegations or conclusory statements. *Greene v. Dalton*, 164 F.3d 671, 675 (D.C. Cir. 1999); *Harding v. Gray*, 9 F.3d 150, 154 (D.C. Cir. 1993). Rather, the nonmoving party must present specific facts that would enable a reasonable jury to find in its favor. *Greene*, 164 F.3d at 675. If the evidence "is merely colorable, or is not significantly probative, summary judgment may be granted." *Anderson*, 477 U.S. at 249-50 (internal citations omitted).

### B. Legal Standard for Judicial Review of Agency Actions

The APA entitles "a person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action . . . to judicial review thereof." 5 U.S.C. § 702. Under

the APA, a reviewing court must set aside an agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Id.* § 706; *Tourus Records, Inc. v. Drug Enforcement Admin.*, 259 F.3d 731, 736 (D.C. Cir. 2001). In making this inquiry, the reviewing court "must consider whether the [agency's] decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989) (internal quotations omitted). At a minimum, the agency must have considered relevant data and articulated an explanation establishing a "rational connection between the facts found and the choice made." *Bowen v. Am. Hosp. Ass'n*, 476 U.S. 610, 626 (1986); *Tourus Records*, 259 F.3d at 736. An agency action usually is arbitrary or capricious if

the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Motor Veh. Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983); see also County of L.A. v. Shalala, 192 F.3d 1005, 1021 (D.C. Cir. 1999) (stating that "[w]here the agency has failed to provide a reasoned explanation, or where the record belies the agency's conclusion, [the court] must undo its action").

As the Supreme Court has explained, however, "the scope of review under the 'arbitrary and capricious' standard is narrow and a court is not to substitute its judgment for that of the agency." *Motor Veh. Mfrs. Ass'n*, 463 U.S. at 43. Rather, the agency action under review is "entitled to a presumption of regularity." *Citizens to Pres. Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415 (1971), *abrogated on other grounds by Califano v. Sanders*, 430 U.S. 99 (1977).

"The requirement that agency action not be arbitrary or capricious includes a requirement

that the agency adequately explain its result." *Pub. Citizen, Inc. v. Fed. Aviation Admin.*, 988 F.2d 186, 197 (D.C. Cir. 1993). This requirement is not particularly demanding, however. *Id.*Nothing more than a "brief statement" is necessary, as long as the agency explains "why it chose to do what it did." *Tourus Records*, 259 F.3d at 737. If the court can "reasonably discern" the agency's path, it will uphold the agency's decision. *Pub. Citizen*, 988 F.2d at 197 (citing *Bowman Transp., Inc. v. Arkansas-Best Freight Sys., Inc.*, 419 U.S. 281, 286 (1974)).

#### C. The Court Grants the Defendants' Motions for Summary Judgment

### 1. Section 303(d) of the CWA is Ambiguous and EPA's Interpretation is Reasonable

Under *Chevron U.S.A. v. N.R.D.C.*, a court reviewing an agency's construction of a statute it administers asks two questions: first, has "Congress . . . directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress." 467

U.S. 837, 842-43 (1984). Second, "if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute." *Id.* at 843; *Pharm. Research and Mfrs. of Am. v. Thompson*, 251

F.3d 219, 224 (D.C. Cir. 2001). A permissible construction is one that is reasonable in light of the record and the purpose of the statute. *Chevron*, 467 U.S. at 845 (holding that if the agency choice "represents a reasonable accommodation of conflicting policies . . . [a court] should not disturb it unless it appears from the statute or its legislative history that the accommodation is not one that Congress would have sanctioned") (quoting *United States v. Shimer*, 367 U.S. 374, 382, 383 (1961)). The court now addresses each *Chevron* step in turn.

a. Under *Chevron* Step 1, the Phrase "Total Maximum Daily Load" is Ambiguous

For "*Chevron* Step 1," the court should apply traditional tools of statutory interpretation

such as "text, structure, purpose, and legislative history," *Pharm. Research*, 251 F.3d at 224, to determine if Congress has directly spoken to the precise question at issue. *Chevron*, 467 U.S. at 843 n.9. In making this determination, the court does not ask "whether Congress has expressed any intention regarding the meaning of the general statutory term," but instead narrowly focuses on the question at issue, thus "reduc[ing] the opportunities for a reviewing court to substitute its own interpretation for that of the agency." *Cent. States Motor Freight Bureau, Inc. v. ICC*, 924 F.2d 1099, 1104 (D.C. Cir. 1991).

Here, therefore, the question for the court is not whether Congress understood the meaning of "daily" when it inserted it into the CWA, but whether Congress had an intent regarding the applicability of the daily load concept to the CWA. *See id.* The court holds that the text of the CWA does not reveal a clear congressional intent to require EPA to calculate only daily TMDLs.<sup>2</sup> As the court explains in the sections that follow, ambiguity exists because (1) the language of the act does not convey with confidence a singular interpretation, (2) Congress' intent on the precise point of the scope of TMDLs is unclear, and (3) the nature of the regulatory method (daily TMDLs) frustrates the effective regulation of the regulatory target (turbidity and BOD pollution in the Anacostia River), thus violating the structure and purpose of the CWA.<sup>3</sup>

The proposition that the CWA should be liberally construed to achieve its objectives has universally prevailed over rigidly formalist challenges to CWA's application and interpretation. *See, e.g., United States v. Std. Oil,* 384 U.S. 224, 230 (1966) (holding that commercially valuable aviation gasoline is "refuse matter" when discharged into a waterbody); *United States v. Eidson,* 108 F.3d. 1336, 1340-42 (11th Cir. 1997) (holding that a man-made drainage ditch is a "navigable water"); *Beartooth Alliance v. Crown Butte Mines,* 904 F. Supp. 1168, 1173 (D. Mont. 1995) (holding that natural water outflow from a mine is point-source pollution and not stormwater runoff). This is not to say that the court is unaware of the proposition "that the 'plain purpose' of the legislation should not be invoked at the expense of the terms of the statute." *Am. Min. Congress v. EPA*, 824 F.2d 1177, 1185 n.10 (D.C. Cir. 1987).

<sup>&</sup>lt;sup>3</sup> Although the court agrees with the outcome of the Second Circuit's decision in *N.R.D.C. v. Muszynski* – namely, that the EPA possesses discretion to phrase TMDLs in non-daily terms – this court

#### i. Language

Statutory interpretation always begins, although it does not always end, with the language of the statute. *In Re England*, 375 F.3d 1169, 1178 (D.C. Cir. 2004) (establishing that courts "begin with the plain language of the statute in question"). The plaintiff contends that section 303(d) should be interpreted by its plain meaning because the instruction "[e]ach state shall establish for [its waters] the total maximum *daily* load [for identified pollutants]" conveys a clear congressional intent to calculate loads in daily terms. Pl.'s MSJ at 13 (emphasis added). If the language is as plain as the plaintiff suggests, then its reading should prevail.

But statutory interpretation requires nuanced analysis recognizing that "ambiguity is a creature not of definitional possibility but of statutory context," *Brown v. Gardner*, 513 U.S. 115, 118 (1994), and that the most natural reading of a statute is not presumptively the correct reading. *Citizens Coal Council v. Gale Norton*, 330 F.3d 478, 482 (D.C. Cir. 2003). Courts will not sacrifice substance on the altar of form, especially without express instruction from Congress. *See United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 132 (1985) (prefacing its holding that wetlands are navigable waters by explaining that while "on a purely linguistic level, it may appear unreasonable to classify 'lands,' wet or otherwise, as waters . . . such as simplistic response [does no justice] to the realities of the problem of water pollution"). This is why

does not reach the same decision as *Muszynski* by determining that literal interpretation of the word "daily" produces "absurd results." 268 F.3d 91, 99 (2d Cir. 2001) (holding that a literal reading of "total maximum daily load" is "absurd" because "for some pollutants, effective regulation may best occur by some other periodic measure than a diurnal one"). The plaintiff reads precedent as commanding that, absent evidence that Congress did not mean what it said or as a matter of logical coherence and structure could not have meant it, the court must consider *only* the plain meaning of a statute in *Chevron* Step 1. Pl.'s MSJ at 16-17. The plaintiff's argument would prevent the court from finding ambiguity in the statute unless literal application (only permitting daily load limits) would produce patently absurd consequences. Under *Chevron* Step 1, however, to find ambiguity the court need only conclude that it is *unclear* whether Congress wanted one interpretation or another, not that a literal application is preposterous. *Chevron*, 467 U.S. at 842-43.

"navigable waters" has not been read in isolation to show congressional intent to preclude EPA from regulating wetlands. *Id.* A court's final conclusion regarding ambiguity follows an interpretation employing all the traditional tools of statutory construction. *Pharm. Research*, 251 F.3d at 224. Thus, the term "daily" from "total maximum daily load" should not be read in isolation as a sacred signifier and bring an end to judicial review. The word "daily" in TMDL is not the type of "plain language" that brings an end to *Chevron* analysis.

#### ii. Intent

As to congressional intent, the court cannot say Congress intended an exclusive and narrow daily load calculation for water pollutants for all circumstances, at any regulatory cost, and for zero or trivial regulatory benefit. *Chevron* Step 1 does not require the court to ask whether Congress intentionally penned the word "daily" into the CWA. *Central States*, 924 F.2d at 1104-05. Rather, as indicated above, the court asks whether Congress had an intent regarding the circumstances at issue here; namely, requiring a daily load calculation even when certain pollutants are more amenable to regulation through seasonal or annual calculations. *See id*.

Beginning with section 402(q) of the CWA, Congress made it clear that EPA's CSO Policy of encouraging flexible approaches involving short-term peaks in pollution levels to manage sewer overflow should prevail. 33 U.S.C. § 1342(q). In section 402(p), Congress ordered that permits for municipal storm sewers be based on "controls to reduce pollutants to the maximum extent practicable, including practices, control techniques and system design and engineering methods." 33 U.S.C. § 1342(p)(3)(B). Were the court to side with the plaintiff, however, the court would in essence alter this congressional choice, mandating daily effluent limits instead of permitting more manageable practices such as non-daily loads. The court thus determines that a comparison of section 402's choice of "best management practices" over "end-

of-pipe numeric effluent limits" for regulating storm sewer discharges and section 303(d)'s choice of "total maximum daily loads" for pollutants interfering with WQSs reveals an ambiguity in the intent of Congress as to which method it prefers. 64 Fed. Reg. 68,722, 68,765 (Dec. 8 1999) (the "Phase II" stormwater regulations).<sup>4</sup>

The plaintiff contends that the section 402 amendments do not formally or constructively override section 303(d). But this is a question the court need not answer. It suffices that under a literalist construction of section 303(d), the section 402 amendments and section 303(d), when evaluated together, reveal a statutory gap that complicates discernment of clear congressional intent under *Chevron* Step 1. *See Nations Bank of N.C., N.A. v. Variable Annuity Life Ins. Co.*, 513 U.S. 251, 257 (1995) (explaining that Congress' intent may be unclear when a statute is ambiguous, silent, or contains a gap).

Of course, where Congress grants one exception, courts should not imply others. *See United States v. Johnson*, 529 U.S. 53, 58 (2000) (noting that "[w]hen Congress provides exceptions in a statute, it does not follow that courts have authority to create others"); *see also Detweiler v. Pena*, 38 F.3d 591, 594 (D.C. Cir. 1994) (noting that "[w]here a statute contains explicit exceptions, the courts are reluctant to find other implicit exceptions"). But the gap between section 303(d) and section 402 does not go so far as to allow an inference of clear congressional intent to manufacture an explicit exception for municipal sewage facilities, and preserve daily TMDLs for all other cases. Absent evidence of the uniqueness of sewage

<sup>&</sup>lt;sup>4</sup> The plaintiff's argument that consideration of the section 402 amendments is not ripe because they apply only to the permitting stage and this case concerns preliminary TMDL calculations fails. States must establish TMDLs for all pollutants for all waterbodies not meeting requisite daily WQSs. 33 U.S.C. §1313(d). If municipalities cannot calculate non-daily TMDLs for their sewage overflow programs, they cannot implement EPA's CSO Policy. It need hardly be said that "when Congress acts to amend a statute, [courts] presume it intends its amendment to have real and substantial effect." *Stone v. INS*, 514 U.S. 386, 397 (1995).

overflow and treatment as a regulatory target, it is inconsistent to declare that Congress intended to grant an exemption from daily loads for sewage and yet preserve daily loads for all other circumstances. Thus, for the purposes of *Chevron* Step I, Congress' intent remains unclear.<sup>5</sup>

## iii. Structure And Purpose

In making the *Chevron* Step 1 analysis, "the words of a statute must be read in their context and with a view to their place in the overall statutory scheme." *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132-33 (2000). The parts of the statute should "fit, if possible . . . into an harmonious whole." *Id.* The operative structure and purpose of the CWA suggests that Congress did not specifically intend a rigid application of the word daily for a number of reasons.

First, because the TMDLs exist only to enable non-attainment waterbodies to achieve daily WQSs, the definition of TMDLs should be consonant with their nature as effective tools to achieve actual water pollution abatement, rather than mere formal controls. *See* 33 U.S.C. § 1313(d)(C) (stating that "[TMDLs] shall be established at a level necessary to implement the applicable water quality standards"). This follows not only from section 303(d)(C), but also from section 303(d)(4)(A), which provides for revision of TMDLs when the effect of such revision "will assure the attainment of such water quality standard." 33 U.S.C. § 1313(d)(4)(A). To prohibit EPA from issuing non-daily TMDLs even when non-daily TMDLs will effectively

<sup>&</sup>lt;sup>5</sup> Of course, Congress may enact contradictory and incongruent legislation that results from hard-fought political compromise, but no evidence exists that the TMDL section represents any such outcome. *See Am. Mining Cong. v. EPA*, 824 F.2d 1177, 1185 n.10 (D.C. Cir. 1987). Even if one argues Congress had some nebulous policy preference for daily loads, insufficiently clear mandates may relieve the relevant agency of total compliance. *Pennhurst State Sch. & Hosp. v. Halderman*, 451 U.S. 1, 19 (1981) (noting how "Congress sometimes legislates by innuendo, making declarations of policy and indicating a preference while requiring measures that, though falling short of legislating its goal, serve as a nudge in the preferred directions") (quoting *Rosado v. Wyman*, 397 U.S. 397, 413 (1970)).

Implement the WQSs would be at odds with the structure of the CWA, because the WQSs and TMDL's exist only to supplement insufficient technology-based controls established earlier under the statute's procedures. *See* 33 U.S.C. § 1311(b)(1)(A) and § 1311(b)(1)(B) (mandating the imposition of best practicable control technology currently available for point sources and secondary treatment methods for public owned treatment works). To require daily load limits regardless of their effect on WQSs would be to substantively transform TMDLs into technology-based controls which are nationally and uniformly imposed as a means of forcing forward technology development, regardless of their effect on curtailing pollutants in specific waterbodies. *See id.* The division of the CWA into mandatory technology controls, on the one hand, and supplemental WQSs and TMDLs, on the other, precludes an interpretation that Congress intended a strict prohibition of non-daily TMDLs.

Second, various sections of the CWA explicitly indicate that Congress did not intend for TMDLs to be imposed only on a daily basis when no benefits arise. Section 302(b)(2)(A) allows EPA to issue a permit modifying an effluent limitation if "there is no reasonable relationship between the economic and social costs and the benefits." 33 U.S.C. § 1302(b)(2)(A). Section 303(d)(4)(B) provides for modifications of effluent limitations based on TMDLs where water quality exceeds or equals the appropriate WQSs and the revision is consistent with an antidegradation policy. 33 U.S.C. § 1313(d)(4)(B). Read together, the sections provide no authority for EPA to unilaterally alter TMDLs at will, but at the very least they indicate Congress' intent not to mandate forms of regulatory action generating zero benefits.

Because none of the potential benefits of applying a literal application of the statute were explicitly contemplated by Congress, they are immaterial to reconstructing Congress' intent or the statute's purpose. The plaintiff has not suggested any benefits from prohibiting EPA from

using non-daily TMDLs (assuming that the TMDLs nevertheless meet the daily WQSs). Even considering such benefits, however, the court still finds use of non-daily TMDLs to be a discretionary choice of EPA. Imposing strict daily TMDLs for all applicable water pollution situations would primarily ease certain administrative costs, such as the translation of TMDLs into permits with effluent limitations that do not vary over time – for example, during a growing season – but are constant day-to-day. Also, the interests of information gathering and policy reversal might be served better through a daily program rather than an annual or seasonal one. Under annual or seasonal intervals, pollution is "bubbled" over a longer period of time than would obtain under a daily interval; thus, the effectiveness of the effluent limits remains unknown longer. But all the above benefits implicate administrative decisions of implementation not contemplated in the statute. Were there evidence of congressional purpose to achieve any of these goals, that would be the end of the matter, and daily TMDLs would be mandatory. But the plaintiff offers no support for such a purpose.

Third, the structure of the CWA and implementation of TMDLs is consistent with a congressional policy to delegate authority to EPA to set non-daily TMDLs where appropriate. *See Brown & Williamson Tobacco Corp.*, 529 U.S. at 159 (explaining that "[d]eference under *Chevron* to an agency's construction of a statute that it administers is premised on the theory that a statute's ambiguity constitutes an implicit delegation from Congress to the agency to fill in the statutory gaps"). Judicial holdings that Congress has left significant issues unaddressed and that read fundamental changes to a regulatory scheme in "vague terms or ancillary provisions" to find "elephants in mouseholes" do not flourish on appeal. *Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 468-69 (2000). However, finding that Congress was unclear on the discretion of an agency to decide the temporal interval for calculating pollution loads – provided that loads meet daily

WQSs – does not threaten Congress' water pollution regulatory scheme. *See Brown & Williamson*, 529 U.S. at 160 (finding the FDA has no authority to regulate tobacco because Congress had created a "distinct regulatory scheme" for the latter). When the discretion to deviate from daily loads arises only in the presence of a pollutant and waterbody more amenable to non-diurnal than to daily regulation, no threat of agency usurpation arises because EPA does not substitute its judgment for that of the Congress. *See MCI Telecomm. Corp. v. Am. Tel. & Tel. Co.*, 512 U.S. 218, 228 (1994) (refusing to merit the suggestion that Congress intended to delegate to an agency the "determination of whether an industry will be entirely, or even substantially, rate-regulated").

The complexity of environmental legislation, and the CWA in particular, buttresses a finding of delegation to agency technical expertise. *See Engine Mfrs. Ass'n v. U.S. E.P.A.*, 88 F.3d 1075, 1084-85 (D.C. Cir. 1996). Complexity also works against the plaintiff's attempt to place importance on a few cross-references to "maximum daily loads" elsewhere in the statute or the use of other temporal terms such as seasonal. While the latter may imply Congress intended to incorporate seasonal variations into daily load calculations, the absence of any other relevant temporal interval runs at cross-purposes to a Congress crafting a detailed regulatory scheme. As a whole, the structure of the CWA indicates EPA possesses bounded discretion to set non-diurnal TMDLs.

Finally, the plaintiff's argument that, absent statutory definition, words should be given their plain meaning, Pl.'s Reply in Support of Pl.'s MSJ at 6-7 ("Pl.'s Reply"), is inapposite where, as here, the statute's purpose contradicts plain meaning. *See generally United States v. Riverside Bayview Homes*, 474 U.S. 121 (1985). In *Riverside*, the Supreme Court held that "an 80-acre parcel of low-lying marshy land that was not itself navigable, directly adjacent to

navigable water, or even hydrologically connected to navigable water" was "waters of the United States" and thus subject to regulation under the CWA. *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159, 176 (2001) (Stevens, J. dissenting and citing *Riverside* holding). The Court found that Congress had "intended to repudiate limits that had been placed on . . . [water pollution] regulation" by earlier definitions of "navigable waters." *Riverside*, 474 U.S. at 133. Further, it found that wetlands and waters were part of a "seamless web" of hydrological activity, the whole of which an agency must possess power to regulate for effective pollution control. *Id.* In light of the evidence of Congress' expansive intent and a complex regulatory object, the Supreme Court found that Congress had intended to construct an effective, comprehensive water pollution control scheme. *Id.* Thus, the Court could not find that Congress had unambiguously intended to exclude regulation of wetlands. *Id.* 

Likewise, because effective regulation "is so intimately tied to knowledge of the industry and the practicalities of regulation that definition [of daily] requires agency expertise," this court cannot find that Congress unambiguously intended to prohibit non-daily regulation of water pollutants. *See Am. Mining Cong. v. EPA*, 824 F.2d 1177, 1184 n.7 (D.C. Cir. 1986) (listing several factors that weigh against plain meaning interpretation, including (1) agency expertise regarding an intimately regulated object and (2) inherent definitional difficulty of a word or phrase). The grant to an agency of an expansive temporal scope for regulation may improve effective pollution control as easily as an expansive geographic scope. *See Riverside*, 474 U.S. at 133 (defining scope of "waters"); *Chevron*, 467 U.S. at 840 (defining scope of "stationary source"); *Ass'n of Data Processing Serv. Org., Inc. v. Bd. of Governors*, 745 F.2d 677 (1984) (defining scope of "closely related to banking"). Aside from being a *temporal* expansion of an agency's regulatory scope, this case differs little from the above cases. Therefore, on

consideration of language, intent, structure, and purpose, the court concludes that the statute ambiguously expresses congressional intent on the question of EPA's authority to utilize non-daily TMDLS.

## b. Under Chevron Step 2, EPA's Use of Seasonal and Annual TMDLs is Reasonable

Having found the TMDL term to be ambiguous, the court now examines the reasonableness of EPA's selection of a yearly term for BOD load limits and a seasonal term for TSS load limits. *Chevron* Step 2 requires courts to defer to reasonable agency interpretations of statutes. 467 U.S. at 842-43. That Congress did not express a clear intent that EPA formulate TMDLs on only daily terms does not mean EPA may formulate TMDLs willy nilly on whatever terms it wishes. Where EPA offers no reasoned explanation for its term or the record contradicts its choice of a term, EPA has acted unreasonably and a court must intervene. *Shalala*, 192 F.3d at 1021; *Muszynski*, 268 F.3d at 99 (holding that to survive *Chevron* Step 2, "EPA must examine the relevant data and establish a rational connection between the facts found and the choice made") (internal quotations and brackets omitted).

EPA, in conjunction with WASA, found that oxygen depletion in the Anacostia River directly relates to the "sediment memory" of deposits that are resuspended during large rainfalls. EPA's MSJ at 16-20. Because the retention time in the sediment is measured in years, EPA concluded that the load reductions should be in years. BOD TMDL Report (BOD-20), at 9 (Joint Appendix ("JA") 392). EPA explained these facts and its conclusions in the BOD TMDL Report. *Id.* Further, the plaintiff has not denied that direct regulation of sediment will generate benefits in long-term pollution reductions. Nor has it produced evidence that yearly load limits will likely lead to violations of the daily WQSs. Because EPA has explained its use of a yearly BOD term, and no evidence exists of another superior temporal term, EPA's selection of a yearly

term is reasonable. *Cf. Muszynski*, 268 F.3d at 99 (acknowledging that non-daily measurements are appropriate in certain cases, "given that phosphorus concentrations vary seasonally and annually," but indicating that EPA failed to state why an annual measurement would be better than a seasonal one).

EPA's seasonal Total Suspended Solids ("TSS") TMDL for turbidity is reasonable for similar reasons. EPA considered that the TSS concentration in a waterbody impacts the degree to which light penetrates waters, thereby dispelling murkiness, which can hinder recreational enjoyment and plant growth. EPA's MSJ at 21-22. EPA further recognized that TSS levels do not impact plant growth outside of the growing season. TSS TMDL Report (TSS-1, at 36 (JA 715); Chesapeake S.A.V. Report (TSS-55), at iv, 97 (JA 88, 107). From these facts, EPA concluded that seasonal load reductions were appropriate for effectively regulating TSS pollutants. *Id*.

Of course, the TMDLs must achieve the WQSs for all the designated uses of the Anacostia River, which include recreational and aesthetic use as well as wildlife protection. JA 685. WQSs include numeric and narrative criteria, the latter of which for the Anacostia includes the command that the river shall be free from "objectionable odor, color, taste, or turbidity." *Id.* The plaintiff argues that EPA's approval of the seasonal TSS TMDL was unreasonable because, even if a seasonal load were appropriate for wildlife protection, it fails to consider aesthetic and recreational uses, and thus violates daily WQSs without explanation. Pl.'s MSJ at 19. However, this argument more directly concerns the ability of the TSS TMDL to achieve the daily WQS for recreational and aesthetic use than the question as to the proper formulation of the temporal terms in the TMDL calculation. As a matter of selecting which environmental problem to investigate to formulate the TMDL, EPA has chosen the most pressing and the one for which the

most data is available without incurring substantial delay and cost; namely, the deleterious effects of turbidity on wildlife. EPA explicated its choice in the record. JA 685-86. Its choice is consistent with the record. *Id.* The court, therefore, finds EPA's choice reasonable, and addresses the gravamen of plaintiff's argument about the effectiveness of the TSS TMDL in Part 2(b), *infra*.

# 2. EPA Reasonably Concluded that the TMDLs Will Achieve Daily WQSs

## a. The BOD TMDL Achieves the District's Daily WQSs

The court next considers whether EPA has calculated the TSS and BOD TMDLs at a level reasonably stringent enough to achieve the District's WQSs. The plaintiff argues that EPA's TMDLs do not represent a reasoned evaluation of the pollution control necessary to achieve the District's daily WQSs because the TMDLs fail to consider the impact of short-term pollution peaks. EPA argues that its TMDLs will achieve the daily WQSs because EPA has used scientific modeling to account for daily short-term peaks.

A court must uphold a TMDL if it falls within a "zone of reasonableness." *Hercules, Inc.* v. EPA, 598 F.2d 91, 106-07 (D.C. Cir. 1978) (noting that "[a] principal rationale for the 'zone of reasonableness' concept is that it frees the court from the minutiae of particular calculations, and correspondingly, it allows an agency discretion to adapt a general formula or methodology to the aspects of a particular case"); accord WorldCom, Inc. v. F.C.C., 238 F.3d 449, 462 (D.C. Cir. 2001). "Such relevant evidence as a reasonable mind might accept as adequate to support a conclusion" suffices to uphold an agency's conclusions. *Universal Camera Corp. v. N.L.R.B.*, 340 U.S. 474, 477 (1951). In light of scientific uncertainty regarding the impact of short-term peaks on the dissolved oxygen level, cf. Hercules, 598 F.2d at 107, and considering EPA's use of reliable computer modeling, the court finds EPA has shown sufficient evidence that the annual

BOD TMDL is reasonably calculated to achieve the dissolved oxygen daily water quality standard.<sup>6</sup>

The plaintiff contends that EPA's arguments constitute mere post-hoc rationalizations for why the BOD TMDL will meet the daily dissolved oxygen WQS despite large short-term discharges. Courts frown on post-hoc rationalizations of discretionary agency behavior because such rationalizations prevent proper judicial review. *Am. Lung Assn. v. EPA*, 134 F.3d 388, 392 (D.C. Cir. 1998). However, an agency may provide an "amplified articulation" of its decision that goes beyond the record, as long as the court can find "essential postulates for the agency rule" *in* the record. *Local 814, Int'l Bhd. Of Teamsters v. N.L.R.B.*, 546 F.2d 989, 992 (D.C. Cir. 1976).

Specifically, the plaintiff contends that EPA (1) never offered a sediment memory rationale during administrative hearings and (2) never explained how large discharges would meet the daily dissolved oxygen WQS. But, because the entire TMDL calculation process performed by WASA and EPA inherently contemplated relying on sediment reduction to increase dissolved oxygen levels, whether or not EPA was too cryptic in its formal hearings is immaterial to the question of the reasonableness of EPA's actions. Indeed, in its BOD Decision Rationale, EPA explicitly states that "sediment oxygen demand also reduces the dissolved oxygen and is included as a sub-model to [the computer model]." JA 640. One may very reasonably infer the sediment memory rationale from the data and scenarios simulated by the computer model, which included sub-models factoring the effects of (if not supplying a single

<sup>&</sup>lt;sup>6</sup> The plaintiff initially raised the question of the existence of TMDLs for nutrients (nitrogen and phosphorous). After an explanation by the EPA as to the implicit inclusion of nutrient wasteloads within the BOD TMDL instead of into a separate TMDL, the plaintiff removed the question from the court conditioned on a request that the court hold that the nutrient wasteloads in the BOD TMDL be preserved for later incorporation into permits. The court so holds. *See* EPA MSJ at 26-28.

variable for) sediment resuspension. JA 140. This applies equally or even more so to plaintiff's second claim regarding large short-term discharges because the record amply demonstrates that EPA and WASA fine-tuned load reduction levels to ensure that infrequent but heavy rainfalls would not result in daily WQS violations. *See* BOD Decision Rationale (BOD-1), at 20-22 (JA 633-35) (describing how WASA ran 13 scenarios with varying reduction levels, found that WQSs were not met only during large storms for Scenario 11, then increased reductions to meet WQSs).

The plaintiff next notes that, because the defendants' computer model relied on daily loads that never contemplated short-term excess discharges, EPA may not replace these daily loads with annual loads that do contemplate excess discharges and still assume that daily WQSs are achieved because to do so would violate daily WQSs, and, thus, constitute unreasonable EPA action. Pl.'s Reply at 21. A TMDL which violates the daily WQSs is not only unreasonable but unlawful. 33 U.S.C. § 1313(d)(1)(C) (stating that loads "shall be established at a level necessary to implement the applicable water quality standards"). The defendants did not address this charge in any of their briefs, and, as the issue is highly perplexing, were inexcusably remiss. However, perusal of the record describing the mechanics of the computer model offers a sufficient defense to the plaintiff's charge. See JA 390-92, 639-40. Because an explanation exists in the record and other arguments by the defendant tangentially address the plaintiff's charge, the court will not deem this issue waived by the defendant. See EPA's MSJ at 18-20 (describing the calibration of the computer model and subsequent execution of load scenarios).

<sup>&</sup>lt;sup>7</sup> *Cf. Motor Veh. Mfrs.*, 463 U.S. at 43 (noting that although courts "may not supply a reasoned basis for the agency's action that the agency itself has not given," courts "will, however, uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned") (internal citations and quotations omitted). Here, the court can find EPA's path, but would have appreciated clearer directions.

It is true, as the plaintiff observes, that inputs into the model include only daily values, not average annual ones; however, the model still integrates periodic excess discharges into its calculations because it was calibrated and verified using historical yearly data on dissolved oxygen levels. EPA MSJ at 18. Having tested the accuracy of the model's simulation programs against that data, the defendants determined that the model could reasonably predict how a percentage reduction in loads would affect daily dissolved oxygen levels. *Id.* Therefore, while it is true that the annual percentage reductions were averaged out uniformly over each day, the model still predicted periodic storm events in which load levels would uncontrollably increase for a short time. Otherwise, preliminary simulation runs could not have failed to achieve dissolved oxygen levels through storm events, as they sometimes did. See JA 633 (describing how in Scenario 11 standards were met except for three storms). Having established yearly and seasonal TMDLs, EPA must show that it considered the implications of using such larger periods for meeting daily WQSs. See Motor Veh. Mfrs., 463 U.S. at 43 (holding that an agency may not rely on factors Congress did not wish it to consider or ignore important aspects of the problem). The computer modeling shows that EPA did so. JA 633. It is obviously irrelevant whether the defendants integrated large short-term discharges through an annual average load input with volatile daily values or into the hard-wiring of the modeling program itself. What matters is simply that they be there, and they are.

The plaintiff also argues that the defendants have not shown how a TMDL that permits short-term daily spikes in pollution levels can achieve daily WQSs. Again, the court need only determine whether EPA's TMDLs are reasonably calculated to achieve the District's daily WQSs. *See Chevron*, 467 U.S. at 845. Although the defendants must explain *why* they believe daily WQSs may be achieved despite occasional daily spikes, *e.g.*, *Shalala*, 192 F.3d at 1021,

they need not explain precisely *how* daily WQSs can be achieved despite spikes. A conspiracy of circumstances, not EPA's load reductions alone, determines whether the discharge of BOD pollutants causes oxygen depletion immediately, much later, or never at all. JA 392. It probably goes too far to say the stars must align, but sunlight, temperature, volume, flow, and tide must all interact in a precise manner to activate the chemical process by which the deposited materials deplete oxygen and actually become functional pollutants. *Id.* This inherent complexity does not allow EPA to throw up its hands and pick a load level based on the "dart rule," but it does demonstrate the scientific uncertainty involved in BOD calculations. And where such uncertainty exists, courts invariably defer to reasonable agency conclusions. *Public Citizen Health Research Group v. Tyson*, 796 F.2d 1479, 1505 (D.C. Cir. 1986) (affirming that "as long as Congress delegates power to an agency to regulate on the borders of the unknown, courts cannot interfere with reasonable interpretations of equivocal evidence").

Despite EPA's protestations, the computer model did not show that the annual BOD TMDL would achieve daily WQSs for every day of the year. *See* JA 634 (stating that Scenario 11 predicted that daily WQSs for dissolved oxygen will not be met four times in the model wetter-than-average year). In fact, EPA specifically rejected the one simulation (Scenario 13) in which a combination of load reductions from various dissolved oxygen pollutants achieved WQSs *at all times*. JA 392-93. Instead, EPA reduced the BOD loads used in the Scenario 11 simulation by 17,244 pounds, and concluded this would suffice to achieve WQSs. *Id.* at 393-96. However, because the court agrees that EPA cannot predict exactly how many dissolved oxygen events will occur, even with advanced computer modeling, and it is reasonable to assume that the 17,244-pound reduction will significantly reduce such events, EPA did not act unreasonably in

approving the BOD TMDL. EPA's decision may be many things, but it is not unreasonable.<sup>8</sup> As courts must defer to agency policy determinations when equivocal evidence exists – and the plaintiff has not even offered any contradictory evidence regarding the sufficiency of the 17,244-pounds additional reduction – the court must defer to EPA's conclusion that this reduction may reasonably achieve compliance with dissolved oxygen WQSs. *See Ethyl Corp. v. EPA*, 541 F.2d 1, 28 (D.C. Cir. 1976) (holding that an agency has the power to regulate even where "the evidence [is] difficult to come by, uncertain, or conflicting").

The plaintiff also maintains that, even assuming *arguendo* that large discharges can occur without violating daily WQSs, the CWA obliges EPA to calculate TMDLs with "a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality." Pl.'s Sur-reply at 2 (citing 33 U.S.C. § 1313(d)(1)(C)). As a preliminary matter, the court notes that the plaintiff misconstrues the threshold for satisfying a margin of safety requirement. In establishing a margin of safety, EPA *may* err on the side of overprotection, but it need only take into account all the relevant evidence in the record. *Am. Petroleum Inst. v. Costle*, 665 F.2d 1176, 1186 (D.C. Cir. 1981). EPA's regulations state that EPA may consider such factors as "the nature and severity of the health effects involved, the size of the sensitive population(s) at risk, and the kind and degree of the uncertainties that must be addressed." 59 Fed. Reg. 58958, 58959 (2004). But, "[g]iven that the "margin of safety" requirement by definition only comes into play where no conclusive showing of harm exists, such factors . . . have their inherent limits as guides to action." *Id.* Thus, "[t]he selection of any

<sup>&</sup>lt;sup>8</sup> While the court in its own assessment believes that Scenario 13 would be more likely to achieve dissolved oxygen WQSs than EPA's decision to use Scenario 11 and then backtrack into compliance by reducing BOD loads, the court must still sustain EPA's actions so long as the court can recognize EPA's approach as merely not unreasonable.

particular approach to providing an adequate margin of safety is a policy choice left specifically to the Administrator's judgment." *Id.* (citing *Lead Indus. Ass'n v. EPA*, 647 F.2d 1130, 1160 (D.C. Cir. 1980) (declaring that the existence of evidence in the record supporting conclusions other than those drawn by the Administrator does not preclude a court from finding the Administrator's decision was reasonable)). Moreover, a court is "particularly deferential when reviewing agency actions involving policy decisions based on uncertain technical information." *New York v. Reilly*, 969 F.2d 1147, 1150-51 (D.C. Cir. 1992). In sum, absent a showing that an agency's selection bears no rational relationship to the administrative record, courts defer to an agency's choice of approach for deriving a margin of safety as a matter of administrative policy and scientific uncertainty.

To integrate the margin of safety, EPA may use conservative model assumptions to calculate the allocations or explicitly allocate a portion of the allowable load to the margin of safety. BOD Decision Rationale (BOD-1), at 27 (JA 640). EPA did both. It devised an implicit margin of safety for the CSO component of BOD loads by assuming CSO concentrations were constant over time when in reality concentrations are higher for the first one-half inch of storm water runoff. JA 640. Hydrologists have aptly dubbed this the "first flush" effect. *Id*.

Therefore, EPA's 90% CSO reduction component of its BOD TMDL will capture over 90% of the oxygen-depleting stormwater runoff. *Id*. EPA also established a 1% margin of safety ("MOS") reduction for each BOD TMDL parameter. EPA's MSJ at 19. When an agency sets a low MOS because of the close calibration between predicted and observed pollution levels, it is not relying "on factors which Congress has not intended it to consider." *Shalala*, 34 F.3d at 1167. The record shows that for the time during which dissolved oxygen events acutely arise (the summer season), EPA's computer model performs particularly well. TAM/WASP Model

(BOD-48), at 66-120 (JA 208-62). Because the plaintiffs have not come forward with contradictory evidence regarding the sufficiency of this percentage reduction, and because the science is uncertain, EPA's margin of safety cannot be said to be unreasonable.

Finally, the plaintiff contends that the BOD TMDLs violate the dissolved oxygen WQSs by failing to account for upstream loads of BOD flowing downstream past the Maryland-DC border of the Anacostia River. Pl.'s MSJ at 38. During the public comment period for the BOD TMDLs, the plaintiff's expert pointed out, citing an analogous textbook scenario, that even if Maryland's BOD loads meet the District's WQSs at the Maryland-DC boundary, downstream dissolved oxygen violations will occur due to residual BOD pollution. Pl.'s MSJ at 38. EPA replies that the expert's comment is irrelevant because it (a) is not based on any "data, models or analyses in the record, [but] simply states an argument that is unsupported by any facts," and (b) preceded subsequent storm-event load reductions by EPA of 17,224 pounds, which, combined with the 1% margin of safety reduction, will "significantly reduce the number of [downstream] low dissolved oxygen events," and, thus, reasonably assure achievement of WQSs. EPA MSJ at 34.

An agency's scientific conclusions deserve deference when based on equivocal evidence. *Ethyl Corp.*, 541 F.2d at 28. Equivocal evidence includes "suspected, but not completely substantiated, relationships between facts, from trends among facts, from theoretical projections from imperfect data, from probative preliminary data not yet certifiable as 'fact,' and the like." *Id.* At best, the expert's testimony might be described as a theoretical projection from imperfect data. As such, the evidence is equivocal and does not mandate a decision one way or the other. *See id.* Were courts to allow unsubstantiated expert testimony to trump agency scientific analysis without a showing of ignored or contradictory data, administrative rule-making would freeze in a

state of perpetual litigation and proceed at a glacial pace. EPA need only show its decision rested on a reasonable interpretation of equivocal evidence. *Id.* As no data substantiates the expert's theory, EPA justifiably interpreted his evidence of downstream pollution violations as equivocal and insufficiently probative of the matter. Accordingly, the plaintiff's claim regarding the EPA's insufficient consideration of upstream load impacts fails.

### b. The TSS TMDL Achieves the District's Daily WQSs

The plaintiff next argues that the TSS TMDL violates the District's daily WQSs because (1) EPA established it at a level necessary to protect the wildlife but not the aesthetic and recreational use of the Anacostia River, and (2) the seasonal nature of the TSS TMDL permits large short-term discharges that violate daily WQSs for turbidity. Pl.'s MSJ at 26-31. EPA replies that the load level for protecting wildlife is adequate to protect the other uses and that daily WQSs will not be violated. EPA's MSJ at 23-26.

WQSs consist of designated uses of waters and water quality criteria based on such uses.

33 U.S.C. § 1313(c)(2)(A). These criteria shall "protect the public health or welfare, enhance the quality of water and serve the purposes of [the CWA]." *Id.* The uses shall take into account "value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes." *Id.* States may develop and implement WQSs on their own initiative, applying the above with wide discretion, or delegate the duty to EPA. 33 U.S.C. § 1313(b)(1). The District has categorized the Anacostia River as suitable for primary conduct recreation (swimming), secondary conduct recreation (boating) and aesthetic enjoyment, and protection of fish, shellfish, and wildlife. JA 684. It has issued narrative water quality criteria mandating its rivers' waters be free from substances that "produce objectionable odor, color, taste, or turbidity" and "impair the biological community which naturally occurs in the

waters." JA 685.

EPA argues that, although the TMDL was calculated to achieve wildlife protection, the substantial size of the TSS reduction (77%) contemplated in the TMDL allows EPA to reasonably assume that the recreational and aesthetic uses will nevertheless be met. The case law supports EPA's decision to use a surrogate standard for achieving the aesthetic and recreational uses of the river instead of conducting a separate data-intensive investigation, provided the decision is reasonable. Moreover, the CWA itself supports EPA's authority to use a surrogate. Section 303(d)(1)(C) requires only that the TMDL load "shall be established at a level necessary to implement the applicable water quality standard[]." 33 U.S.C. § 1313(d)(1)(C). Congress does not dictate the specific process for calculating a TMDL; it only requires that the TMDL achieve the pertinent WQS. A surrogate standard that does so is therefore permissible.

The plaintiff more cogently argues that, conceding EPA's authority to use a surrogate value, the 77% TSS load reduction fails to protect aesthetic and recreational uses because it permits the remaining 23% of the load to be discharged all at once or separately during a few storm events. Pl.'s Sur-reply at 5. The question of the sufficiency of the BOD TMDL was simplified by a numeric criteria level for dissolved oxygen against which attainment could be gauged. Here, a more complicated question arises due to the lack of a numeric criteria for recreational and aesthetic use. The plaintiff has convincingly adduced evidence in the record of

<sup>&</sup>lt;sup>9</sup> See, e.g., Sierra Club v. EPA, 353 F.3d 976, 985 (D.C. Cir. 2004) (holding that even if the ratio of the indirectly regulated pollutant to the directly regulated pollutant is "small and variable, or simply unknown," the surrogate is reasonable if it indiscriminately reduces the indirectly regulated pollutant) (quotations omitted); Nat'l Lime Ass'n v. EPA, 233 F.3d 625, 637 (D.C. Cir. 2000) (holding that EPA may regulate a pollutant indirectly when its emissions are controllable by regulation of other pollutants) (describing N.R.D.C. v. EPA, 822 F.2d 104, 125 (D.C. Cir. 1987)); accord N.R.D.C. v. Muszynski, 268 F.3d 91, 100-01 (2d Cir. 2001) (explaining that "while at first blush [the] use of an aesthetic water quality standard to protect drinking water seems a cause for concern . . . [the] primary concern . . . is whether or not the TMDL will 'implement the applicable water quality standard'").

numeric criteria for TSS concentrations necessary to prevent turbidity substantially lower than EPA's proposed 15 mg/L TMDL. JA 656. The plaintiff has even shown that EPA itself has calculated that, on certain days, the daily TSS concentration levels will be as much as 65 mg/L above EPA's seasonal TMDL load level. JA 657.

However, these facts, by themselves, cannot constitute evidence that EPA has ignored or acted contrary to the record, because the turbidity standard is a narrative one and, thus, subjective. "Subjective" not in the sense that EPA may regulate as it likes, but in the sense that, absent a translation by the District or EPA of the open-ended criteria into a numerical end-point, the court cannot recognize the plaintiff's evidence as objective facts that clearly contradict EPA's assertion that current reductions are reasonably calculated to achieve compliance in the future.

See Ethyl Corp., 541 F.2d at 28 (deferring to an agency when equivocal evidence exists). Where a subjective water quality criteria such as "objectionable turbidity" has not been translated into a numeric pollution-concentration endpoint, no frame of reference exists against which to compare evidence. American Iron & Steel Inst. v. EPA, 115 F.3d 979, 990-91 (D.C. Cir. 1996). Thus, one cannot say a 77% reduction will not result in the elimination of objectionable turbidity for recreational and aesthetic use.

The District's turbidity water quality criteria states that there shall be no "objectionable" turbidity. JA 685. Objectionable to whom, one might wonder. The enumeration of recreational and aesthetic designated uses supplies one answer. JA 684-85. Without any evidence on the point, the court is not prepared to say that recreational and aesthetic use reasonably contemplates the utilization of waters immediately after infrequent, disruptive storm events. Without more, the court cannot judge it reasonable to tie EPA's hands and incur further delay and cost to the final implementation of the TSS TMDLs. The court should not force EPA to conduct a separate

survey to gather evidence of recreational and aesthetic use when no evidence exists of a discrete concentration level past which recreation and aesthetic use would be violated. *See Ethyl Corp.*, 541 F.2d at 28 (deferring to an agency decision based on equivocal evidence).

The plaintiff is correct that the fact that the narrative criteria for turbidity is "subjective" does not give unbounded discretion to EPA. But this does not mean that EPA's decision-making process must yield to the whim of that unlikely aquatic enthusiast who will not tolerate anything less than the immediate enjoyment of river waters after disruptive storm events. As EPA expresses its willingness to revise the TSS TMDL subject to a future showing that the TSS seasonal average of 15 mg/L still violates the District's narrative criteria, the court concludes that EPA's use of an aquatic life surrogate value of a 77% TSS load reduction was reasonably calculated to achieve the daily WQSs for turbidity.<sup>10</sup>

## 3. EPA Properly Assigned Wasteload Allocations in Conformity With its Regulations

Moving along, the court addresses the plaintiff's argument that EPA acted unlawfully by violating its own regulations requiring allocations of wasteloads in the TMDLs to specific point-sources of pollution. EPA's regulations define a TMDL as "[t]he sum of the individual WLAs [wasteload allocations] for point sources and the LAs [load allocations] for nonpoint sources and natural background." 40 C.F.R. § 130.2(i). In turn, a wasteload allocation is "[t]he portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution." 40 C.F.R. § 130.2(h). EPA's TMDLs assign wasteloads for the Anacostia River to CSOs – all of which are covered by a single permit to the Blue Plains Water Treatment Plant –

<sup>&</sup>lt;sup>10</sup> See Am. Iron, 115 F.3d at 990-91 (reiterating its approval of EPA's regulations describing methods of translating narrative criteria into numerical criteria during the permit process) (citing 40 C.F.R. § 122.44(d)(1)(vi)).

and stormwater sources – which are covered by a single permit to the District's municipal separate storm sewer system ("MS4") – rather than to each formal point source of pollution; i.e., a "pipe," "conduit," or other "discernible, confined and discrete conveyance." 33 U.S.C. § 1362(14). The plaintiff's argument rests on this variance.

EPA's assignment of wasteloads represents a reasonable interpretation of its regulations. An agency's interpretation of its own regulations deserves substantial deference. *See Auer v. Robbins*, 519 U.S. 452, 461 (1997); *Thomas Jefferson Univ. v. Shalala*, 512 U.S. 504, 512 (1994). Provided the agency's interpretation "does not violate the Constitution or a federal statute, it must be given 'controlling weight unless it is plainly erroneous or inconsistent with the regulation." *Stinson v. United States*, 508 U.S. 36, 45 (1993) (quoting *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410, 414 (1945)). For the reasons that follow, the court determines that EPA's action is consistent with the purpose of the CWA and not plainly erroneous.

As an initial matter, given that the regulation does more than what Congress requires EPA to do in the CWA, the plaintiff's complaint reaches unsympathetic ears. Assignment of wasteloads to individual point sources is an act specifically reserved to the permitting process and delegated to states because it represents a highly local and political judgment of who bears the regulatory cost of compliance. *See* 33 U.S.C. § 1251(b) (stating the "[i]t is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources"). The plaintiff contends that failure to hold EPA's feet to the fire will result in source-specific allocation decisions being "postponed and made on an ad hoc, source-by-source basis in individual permit proceedings," denying "guidance to permit writers." Pl.'s MSJ at 37. This argument strikes the court as mainly a policy

quibble, but even from the perspective of EPA's regulation, the argument is meritless.

For each category that EPA has assigned wasteload allocations, a single regulated entity (the treatment plant for CSOs and the MS4 for stormwater) exists which will receive a single permit for all its constituent point sources. Were EPA issuing multiple permits for the wasteload allocations, a more complicated problem would confront permit writers and the mandating of allocation of loads to individual sources would serve to simplify that problem. Here, EPA's acts are in substantial conformity to the purpose of its regulations. See Mine Reclamation Corp. v. FERC, 30 F.3d 1519, 1525 (D.C. Cir. 1994) (finding that FERC acted reasonably in not requiring a hydroelectric permit applicant to identify the source of its waters pursuant to regulations because no purpose would be served when water came from a storage reservoir rather than a river or lake). Congress and EPA agree that, in the municipal storm water context, the CWA allows systemwide rather than point source treatment of discharges in TMDLs and permits. See 33 U.S.C. 1342(p)(3)(B)(i) (stating that "[p]ermits for discharges from municipal storm sewers . . . may be issued on a system or jurisdiction-wide basis"); 40 C.F.R. 122.26 (d)(2)(iv) (stating that management programs for storm water permit application "may impose controls on a systemwide basis, a watershed basis, a jurisdiction basis, or on individual outfalls"). The plaintiff argues that EPA may not bootstrap rules and regulations applicable to the permitting process to the TMDL process, but the plaintiff commits the same offense by prematurely invoking purposes of the permit process in justifying early individual wasteload allocation during the TMDL process. Because EPA's allocation of wasteloads to categories of sources does not deviate from the purpose of the regulation and is implicitly countenanced by other sections of the CWA, EPA has not acted improperly.

## **IV. Conclusion**

For all the foregoing reasons, the court grants the defendants' motions for summary judgment and denies the plaintiff's motion for summary judgment in whole. An order directing the parties in a manner consistent with the Memorandum Opinion is separately and contemporaneously issued this 29th day of November, 2004.

RICARDO M. URBINA United States District Judge